Quiz 1

International Economics
Monterey Institute of International Studies
Fall Semester 2001
Dr. Robert M. McNab

Instructions: You may use any material you believe necessary to answer each question, to include lecture notes, the recommended readings, or other materials. You may not collaborate in any way with another student in this class. The instructor reserves the right to give any student an oral exam in lieu of this written exam if collaboration is suspected.

Time: The deadline for this exam is Tuesday, October 9, 2001 at 6pm. You may email your answers before the deadline or present your completed exam in person. The instructor will not accept exams that are turned in late.

Structure: Read each question carefully. In some cases, a question may be dependent upon your answer to a previous question. Answer each question to the best of your ability. Each answer will be graded completely, that is, if you include supplemental information in your answer that is not correct, the supplemental information will also be graded. Complete, concise answers have historically received higher grades than complete, rambling answers. Finally, the student should completely edit their exam to ensure that no significant style, grammar, or content errors remain before submitting the exam for grading.

- 1. Develop an arithmetic example that illustrates how a nation could have an absolute disadvantage in the production of two goods and could still have a comparative advantage in the production of one of them. (10 Points)
- 2. Discussing constant and increasing opportunity costs (35 Points)
 - a. What is meant by constant opportunity costs and increasing opportunity costs? (5 Points)
 - b. Under what conditions will a country experience constant or increasing opportunity costs? (10 Points)
 - c. How are constant and increasing opportunity costs related to the specialization of a country in the production of a good in which it has a comparative advantage? (10 Points)
 - i. Illustrate the differences between the autarkic production and consumption points under the assumptions of constant and increasing opportunity costs. (5 Points)

- ii. Illustrate the transition from the autarkic state to the post-trade state under the assumptions of constant and increasing opportunity costs. (5 Points)
- 3. Discussing Marginal Utility, Indifference Curves, Law of Demand (35 Points)
 - a. Discuss, in your own words, the relationship between the Law of Diminishing Marginal Utility, Indifference Curves, and the Law of Demand. (15 Points)
 - b. Using your answer in (3) as a starting point, discuss how indifference curves are used to determine the autarkic point of consumption and production under the assumption of increasing opportunity costs. (10 Points)
 - c. Illustrate, using (3) and (a) as a starting point, the potential gains from trade under the assumption of increasing opportunity costs. Ensure that you use two countries and two goods to illustrate how the terms of trade are achieved, what are the autarkic and post-trade consumption and production points on the transformation schedule, the direction of trade, and the amount of exports and imports for each country. (10 Points)

4. Supply schedules (20 Points)

- a. Illustrate the differences between supply schedules under the assumptions of constant and increasing opportunity costs. (10 Points)
- b. Using (4) as a starting point, illustrate how a change in productivity would influence the supply schedules of each nation under the assumptions of constant and increasing opportunity costs. (10 Points)
- c. **Bonus**: Using (4) and (4a), illustrate how a change in productivity could change the comparative advantage of each nation from one good to another. Note how the change of productivity influences the opportunity costs in each country and the transformation schedules. (5 Possible Points)
- 5. **Bonus**: Discuss, in your own words, how the Laws of Diminishing Marginal Returns and Utility are related to indifference curves and transformation schedules, respectively, and how these observations can result in a linkage between indifference curves and the law of demand and transformation schedules and the law of supply. (10 possible points)